DOCUMENT RESUME

ED 325 228 PS 019 166

AUTHOR Bowman, Barbara
TITLE Building the Foundations for School Success: Issues in Early Childhood Education.
PUB DATE Nov 90
NOTE 38p.; Paper presented at the Conference on Preparation and Professional Development Programs for Early Childhood Educators: Emerging Needs for the Next Decade (New York, NY, November 7-8, 1990).
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Compensatory Education; *Disadvantaged Youth; Early Childhood Education; *Educational Policy; *Educational Practices; *Elementary School Curriculum; Guidelines; Public Schools; *School Role

ABSTRACT

Several questions concerning early childhood education are addressed. These include: (1) How should the curriculum for young children be framed? (2) What are effective intervention strategies for at-risk children? (3) How does the public school need to change to accommodate new responsibilities caused by changes in its mission and clientele? Section I presents a perspective on curriculum and educational practices for children between 4 and 8 years of age. Section II considers early childhood education as an intervention for poor and minority children. Section III reflects on the problems of the public schools in responding to changed responsibilities. Section IV makes seven general policy recommendations, including the following: (1) avoid rigid standards of practices and accountability; (2) encourage new governance and administrative structures; (3) coordinate school programs with day care and other educational services; and (4) provide adequate funding for intervention programs. Citations number 82. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 352228

BUILDING THE FOUNDATIONS FOR SCHOOL SUCCESS: ISSUES IN EARLY CHILDHOOD EDUCATION

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Barbara T. Bowman
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Barbara Bowman
Director of Graduate Studies
Erikson Institute

Introduction

Early in the decade, public attention became riveted on the failures of American schools (Children at Risk, 1981). The "crisis in education" was the focus of various interest groups and professional organizations, as well as parents, legislators, and the public-at-large. It was of concern to both critics and defenders of the educational establishment. Although there have been some differences of opinion about to the causes of the "crisis," there is agreement that American schools have failed to educate large numbers of children, as exemplified by poor academic achievement and high drop out rates (Council for Economic Development, 1987). Educators, economists, and political scientists argue that if current trends continue, the United States will experience unacceptably high rates of unemployment and underemployment, increasingly low standards and productivity of workers, a decline in economic competitiveness in world markets, and major social upheavals as the population is increasingly poor, minority, and undereducated.

PS 020 351

In order to rectify the failure, two educational strategies are proposed: first, raise the level of educational achievement of all children, and second, expand the number of children able to do higher level work. Preschool education is viewed as an important component of both strategies because of its positive effect on cognitive and social outcomes. There is little evidence that attending preschool is advantageous to the academic achievement of middle class children; however, its social benefits long have been recognized by parents who supported nursery and cooperative schools for their young children. Considerable research has documented the advantages of preschool comprehensive programs for poor children (Lazar, 1982; Hubbell (198 ?), and the negative effects on all children of poor quality day care (Phillips, 1989). Ensuring that children have an opportunity to participate in high

quality early childhood programs is recommended as an effective policy to support academic and social competence.

The term early childhood education does not have a standard definition. In some instances it denotes the years between birth and age 6; in others, ages three to eight. In this paper early childhood education refers to the programs for children from four through eight. The rationale for using this age range is that the children are similar developmentally and require a similar pedagogy; continuity between preschool, kindergarten and the primary grades helps ensure that learning is maintained. the overarching curriculum goal for the period--mastery of alphabetic and numeric symbol systems--ideally begins during the preschool years and continues through the primary grades. The National Association of School Boards of Education (1988) also used this range when it recommended establishing early childhood units in elementary schools, and an increasing number of states offer preschool-primary as a teacher certification category (Mitchell, 1988).

There are different types of early childhood programs. Public and private primary and kindergarten programs, nurseries and preschools, early intervention and compensatory education, and day care and before and after school programs are some of the variety. Each program type has somewhat different goals that affect how and what children learn, but if children are to be well prepared for academic achievement, similar objectives must be pursued.

How should the curriculum for young children be framed? What are effective intervention strategies for at risk children? How does the public school need to change to accommodate new responsibilities caused by changes in their mission and clientele. Section I presents a perspective on curriculum and educational practices for children between four and eight years old; Section II considers early childhood education as an intervention for poor and minority children; Section III reflects on the problems of the public schools in responding to changed responsibilities; Section IV makes some general policy recommendations.

CURRICULUM ISSUES

Appropriate curriculum for young children is a topic of considerable interest for educators, parents, and the general public, as the debate on how to improve education rages. The most prevalent vision of how children learn is of a passive child soaking up lessons from an all-knowing teacher (Rogoff, 1987). During the early years of the reform effort, this model became increasingly entrenched as preschools--as well as kindergartens and primary grades--were caught up in the belief that early and intense focus on academics would improve the performance of children in the later grades.

Early academic instruction and the "pressure cooker" atmosphere of many programs for young children brought on a counter movement led by educators and psychologists subscribing to a "developmental" position. The research base for this model rests on the work of Piaget (1953) and stresses the interactive nature of development. It depicts young children as active learners, constructing knowledge and skills through their own efforts (Kamii & DeVries, 1975). Proponents of this point of view contended that "rushing development" interferes with motivation for and disposition to use school skills. More recently the work of Vygotsky (1976)--stressing internalization of knowledge and skills through social interactions with adults and older peers and teaching to the zone of proximal development--has found its way into the field. According to this perspective, knowledge is not only individual (self constructed) but cultural, with "arbitrary constructions, conventions, and rituals" (Laborde, 1989), which children learn in social settings, according to social rules.

The field also has been influenced by research correlating child outcomes with particular structural characteristics and teaching styles (Phillips, 1987; Schweinhart, 1987). These researchers have pointed to small groups, high ratios of teachers to children, coherent developmental curriculum, and training for staff as the structural characteristics most apt to lead to high levels of verbal interaction between adults and children, to opportunities for children to progress at their own pace and be active in their

efforts to learn, and to support children's self control and pro-social behavior. These structural and interactive features correlate well with desirable social, cognitive, and achievement outcomes.

The term "developmentally appropriate" indicates a tie between the age (developmental level) of children and the content selected for them to learn and the methods employed to teach them. In general, the balance in curriculum is tilted toward social/emotional as opposed to abstract, academic objectives, toward processes as opposed to products, toward learning new skills and information in meaningful contexts, and stressing understanding over rote memorizing. There is consensus among influential professional organizations (Bredekamp, 1987), text book authors (Hohmann, 1979; Seefeldt, 1988) state and local departments of education (Michigan, 1988; New York Public Schools, 1983; NAECS/SDE, 1987) and academics (Kagan & Zigler, 1987) supporting a developmental approach to early education. The Exxon Project (1989), designed to explore mathematics instruction in four Chicago Public Schools, identified four critical features of a developmental early childhood program: linking natural and school learning, child directed learning, scaffolding, and concrete to symbolic sequencing.

Linking natural and school learning. The major task for young children is to connect intuitive (or naturally obtained) knowledge with socio/cultural knowledge (Ginsburg 1982). Lampert (1986) stressed the importance of viewing children as "sense makers." "They need to see connections between what they are supposed to be learning in school and things they care about understanding outside of school, and these connections need to be related to the substance of what they are learning" (p. 340). In the case of mathematics, before entering school, children already know how to count, add, subtract, and solve word problems that occur in the context of their daily lives. Teachers must make a bridge between that knowledge and school curriculum. This approach is even more vital when the children's out-of-school lives differs culturally from that of the school. Teaching and learning rely on building shared contexts for instructional communication.

Child-directed Learning The opportunity for young children to direct their own learning is recognized as a factor in long term achievement (Schweinhart, 1988). Control insures that children obtain the information they need to move to higher levels of understanding. Kamii and DeClark emphasized (1985) the importance of children gaining confidence in their ability to think. Children develop self confidence and autonomy through taking responsibility for solving real problems and working independently. Informal and cooperative learning transfers responsibility onto the learner, who being young and inexperienced, needs time to learn how to regulate learning within the group. While it might seem to be a time saver for the teacher to retain authority, evidence of the advantage of more active, informal and cooperative classrooms is now quite clear (Behounek, et al., 1988). First teachers should emphasize social interactions more than cognitive or technical ones, like children, and make learning enjoyable by using play activities; set high standards using positive reinforcement; and maintain friendly relationships with parents and enlist their support (Bloom, 1985).

Flexibility in curriculum and classroom structure is recommended so that children can follow their own interests. It is the teacher's task to embed school curriculum in a variety of activities so that learning occurs as children explore and play. Classrooms that are responsive to differences in children's interests, maturation rates, and past experience assist children in their struggle for understanding.

Scaffolding Bridging the gap between what a child knows and curriculum objectives may require teacher intervention. According to Vygotsky (1976), when children cannot perform a task alone but can with help, they are at the threshold of new learning. Expert teachers are sensitive to children's skill level and reduce their help as the child becomes more competent (Greenfield, 1984). This help, called scaffolding (Wood & Bruner, 1976), occurs as the teacher provides only the assistance children need to complete a task on their own. It requires close observation and attention by the teacher in order to note individual differences in children's acquisition of new skills. Since many of the skills acquired during early childhood are maturation related, children within groups of the same age are likely to be

quite different. Group instruction, therefore, is a less useful strategy than it is when teaching older children.

Symbolic representation According to the developmental perspective, symbolic representation occurs as children abstract from concrete experience. In addition to play, small manipulatives (sticks, stones, and other physical materials) help mediate between concrete and symbolic abstractions and are highly recommended as transitional supports to learning.

Lilian Katz (1988) concluded that developmentally appropriate instruction for young children should be largely informal, and include spontaneous play in which children use a variety of manipulatives, project work in which children learn from their own efforts but with the guidance of the teacher, and formal instruction which, over the primary years, moves gradually from one to one teaching to small group instruction. While there may be some disagreement about the precise subject matter appropriate for young children, there is essential agreement that the best preschool-primary curriculum should be perceptual, concrete, context bound, and that it should build upon children's prior experience and cultural style, including their family language. Experiences which build self confidence and self esteem are considered important for all children, but are particularly so for children from low status groups, because of their vulnerability to self doubt (Steele, 1989).

In practice, however, many preschool and primary grade programs are quite different. The reform movement's demand for higher levels of performance served to increase emphasis on mastery of basic academic skills, didactic instruction, and reliance on pencil and paper tasks. Martin (1987) eloquently described how these changes in thinking about young children affected kindergarten. She wrote, "Kindergarten used to mean brightly colored paintings, music, clay, block building, bursting curiosity, and intensive exploration. Now the kindergarten's exuberance is being muted, its color drained and spirit flattened, leaving us with stacks of paper and teacher manuals." (p. 22)

The Exxon Project (1989 assessed public school preschool, kindergarten, and primary class rooms, and found poor use of manipulatives, undue emphasis on rote information and drill, large group teaching methods with inadequately scaffolded instruction, abstract and depersonalized content without meaning for the children, and too few experiences that encouraged autonomy and self confidence. A report by the panel on school readiness of the California State Department of Education (1988) found that most California kindergarten and first grade classes are characterized by a skill-specific, formal instructional approach inconsistent with the developmental and learning styles of children of that age.

The conflict between the theoretical positions recommended by leaders in the field and that practiced in many schools and centers is related to a number of factors. Among the most salient are definitions of goals and objectives for education, poor preservice preparation of early childhood teachers and support personnel, and the effort by citizens and legislators to ensure that schools are accountable, thus fueling the push for measurable child outcomes.

Goals and objectives The traditional view of education as the transfer of a known body of information and skills from the adult community to children is a view of education particularly pervasive in public schools. The developmental position, that the acquisition of some types of knowledge and skill is dependant upon active construction by the child, has had difficulty finding a foothold, possibly because of misinterpretation of the developmental position or the difficulty of translating it into classroom practices. Certainly many teachers have had limited exposure to developmental theory during their training, and its application has veered from unstructured and chaotic child directed programs to rigid didactic and large group instructional formats.

New visions of schooling have supported developmental goals. Educators, scientists, and business groups are concerned that school curricula are too narrowly conceived. In mathematics education, for instance, which usually features memorizing number facts, the purpose of instruction is to obtain right answers by applying accepted procedures and computational rules to sets of numbers. A National

Science Foundation report complained that this way of teaching mathematics makes the acquisition of information an end in itself rather than as a tool to solve problems and disassociates mathematics from science and related disciplines by subdividing it into discrete units (arithmetic, algebra, etc.) unrelated to each other. The National Council of Teachers of Mathematics (1987) also questioned the traditional view of mathematics education. The Council recommended that students learn to value mathematics, become confident of their own ability, become mathematical problem solvers, and learn to reason and communicate mathematically. It supported the embedding of mathematics in constructive activities, personally meaningful contexts, and thinking and problem solving, rather than rote drill on meaningless information and skills.

Equal concern was expressed about reading and writing instruction focussed solely on decoding, phonics, and spelling accuracy, ignoring the communication of meaningful ideas (Cole & Griffin, 1986). In addition, emphasis on "individual work, competitiveness, abstractions, and test-driven judgements of student work" were seen as antithetical to the current needs of the market place (Lewis, p. 469). The advocates of this perspective recommended learning to cooperate, and to engage in critical and creative thinking as essential objectives.

Other research into the antecedents of school success have highlighted motivation and capacity to learn as desirable goals of the early childhood programs. During the early school years children develop beliefs about schooling that affect their response to instruction and which have far reaching effects on their school performance (Auerbach, 1989). Children's confidence in their ability to achieve and their view of school knowledge as useful and worthwhile underlie academic competence (Reyes & Stanic, 1988). Therefore, curriculum that erodes children's confidence in their ability to master the skills being taught should be rejected.

In view of the contradiction between these goals and objectives and those found in many schools and centers, a concerted effort must be made to disseminate more broadly what is known about young

children and how they learn, as well as the new conceptions of essential knowledge and skills for children of the Twenty-first century.

Teacher training The key to quality programs for young children is the training of the staff (Ruopp, 1979; Berk, 1985, Phillips, 1987), but many states require only high school graduation as preparation for teaching roles in centers and schools, and caregivers in homes do not even have that requirement. Recently, some states have required teachers and caregivers to obtain training, which may be as little as a few hours to as much as several college level courses. Generally, however, state training requirements are abysmally low.

Some states and programs require specific training for early childhood teachers and directors. The most common are the Child Development Associate Certificate and the Bachelor and Associate Arts degree. Recent mandates by Head Start for Child Development Association Accreditation has assured a higher level of teacher competence in those programs; however, standards for the training and the certificate vary from program to program, with a wide range of quality. Low state requirements, low salaries, and skimpy financial aid in colleges and universities, impedes the attainment of professional degrees, and transfer policies between two and four year institutions prevents many students with two year degrees from obtaining bachelors degrees (Bowman, in press).

There is disagreement about the best content for training. The proper balance between general and subject area education and that devoted to professional issues and methods is unclear. Should teachers of young children concentrate on the traditional disciplines--mathematics, sciences, literature, and history--or should they focus on knowledge more specific to working with young children? Research has associated desirable outcomes for children with teachers trained solely in child development and early childhood education (Ruopp, Travers, Glantx, & Coelen, 1979). These studies suggested that specific information about children, how they learn, how to teach them is a more important underpinning for professional practice than general knowledge. On the other hand, Berk (1985)

reported that teachers with at least two years of college were more apt to display the teaching behaviors associated with better children's programs--more verbal interaction, indirect guidance, encouragement, and direction--than were high school graduates, thus demonstrating "the relevance of broad higher educational foundations for the practical endeavor of providing developmentally stimulating caregiving experiences for young children and for fostering the integration of caregiver child-oriented attitudes with behavior" (p. 127). At present, the research based needed to decide this question is inadequate. Since raising general education standards would reduce the number of available teachers and caregivers, particularly minority ones, changing these standards is problematic. This will be discussed at further in Section III.

Early childhood teachers must learn to work effectively with parents and to supervise and coordinate the contribution of other adults in the classroom. Young children are dependent on the support of their parent's to succeed in school, and teachers must be able to engage parents on behalf of their children's formal education. Accordingly, teachers should relate to parents as collaborators in the education process and, sometimes, act as a resource for parents in carrying out their child rearing responsibility. Teachers must be able to explain to parents the dimension and rationale for the program's goals and methods, while creating an interpersonal climate of respect and cooperation. Early childhood teachers also must be skilled in team building and supervision. Early childhood programs typically have aides and parent volunteers to assist the teacher and may have specialty teachers. The teacher's job is to insure that all of these adults contribute positively to children's learning. Unfortunately, many early childhood teacher and caregiver preparation programs have not met the challenge of preparing teachers for these roles. Teacher training for public schools focuses heavily on classroom methods, often ignoring the special character of early childhood programs requiring work with adults. Outside of public schools, there are few state mandated educational standards for teachers and caregivers which encompass parent involvement and education and/or supervision of staff.

Training is seriously compromised in day care and Head Start by the rapid turnover in staffs (Child Care Employee Project, 1989). High turnover caused by low salaries, poor working conditions, low status, and minimum benefits contributes to a training hemorrhage as experienced workers leave the field for higher paying positions and their places are taken by untrained and inexperienced workers.

Not only is preservice education of early childhood teachers inadequate, in-service training and clinical support are equally deficient. The low salaries and tight budgets characteristic of preschools and day care centers frequently make training a low priority for staff and administration. Moreover, when training is provided, often it takes the form of large group, formal lectures, which teachers have difficulty applying to their practice.

Reform of early childhood teacher education will require different strategies than those presently being explored by the Holmes group. While the benefits of well educated teachers seems self evident, there is little indication that either parents or the public are willing to pay for professional teachers in the recommended rations of ten to fifteen children to one teacher (National Association for the Education of Young Children, 1984). Differential staffing patterns that include professionally trained teachers probably offer the best alternative to an entirely professional staff. However, without state mandates for percentages of trained to untrained staff, the quality of programs will continue to suffer.

More collaboration between teacher training institutions and schools and centers also would improve the quality of children's programs. Presently, colleges and universities assume little responsibility for their graduate's professional practice and they often have difficulty implementing preservice training models in the real world of the classroom. An internship year supervised by college faculty should improve the transition from the higher education to the classroom. Universities might also assist in the preparation of paraprofessionals in schools and centers and work as consultants to teachers and administrators on practice problems. Erikson Institute currently provides this type of support to Head

Start, day care, and public school programs. Staff at every level need assistance in translating what is known about young children into coherent programs, embedding theory with practice.

Quisenberry (1987) pointed out that much of what is wrong with early childhood programs cannot be solved by teacher training alone. She cited such factors as the low esteem of the teaching profession, inadequate financial aid, poor pay, and isolation of beginning teachers as contributing to poor quality of candidates and graduate teachers. State policies, budget problems, demographic shifts, and university politics conspire to make training more difficult and inappropriate practice more widespread.

Accountability

Testing programs also contribute to inappropriate practices. Standardized tests are not good guides to what young children know. It is difficult to accurately assess children's learning and development solely on the basis of tests, and the decisions based on them may actually interfere with achievement. Meisels (1989) condemned "high stakes" tests which are "neither reliable, valid, nor designed for the purposes for which they are being used" (p. 2.)

Tests are considered inadequate guides to the skills and knowledge of young children for a number of reasons. Young children are emotionally and socially labile and respond unpredictably to new situations and people. They may find the testing situation frightening, confusing or uninteresting, and fail to respond correctly to questions, even when they know the right answer. It is also difficult to assess developmental achievements of young children by sampling for specific information. Many accomplishments are not dependent on a specified body of information or set of skills. For instance, children who have already grasped the notion of invariant order of the number tags in counting may not use the correct counting tags, but maintain invariant order (Gelman, 1978). In addition, culturally different children may be developmentally normal without having the same information and/or skills that are characteristic of middle class, white children (Bowman, 1989).

Current strategies for assessing children for educational intervention are woefully inadequate. Mass screening procedures misidentify children who are perfectly normal in development and achievement, and children who have handicaps, are missed. Hillard (1982) noted that many developmentally normal but culturally different children are inappropriately screened into special education. Some programs use poverty and language or family characteristics as the basis for special treatment in preschool and ESEA programs. To treat all young children from a particular background or with a particular biological handicap as needing the same intervention misreads the complexity of development. The inclusion of such children in a high quality early childhood program certainly would do them no harm; however, when teachers and parents believe that screening criteria and tests are diagnostic and treat children accordingly, their expectations become self fulfilling prophecies.

Denunciations of using tests as the sole criteria for decisions regarding promotion, curriculum, and tracking abound (Meisel, 1989). When children were retained in kindergarten, they fared no better than their peers who were not, thus giving children an extra year confirs no real academic benefit (Shepard & Smith, 1986). Using children's performance on standardized tests to evaluate curriculum is also poor practice (Romberg & Carpenter, 1986). . Test driven curriculum constricts opportunities to learn, particularly for young children. When early childhood programs are judged solely on the basis of the test scores of the children, programs, evaluations are biased toward testable content rather than toward the developmental needs of the young child (Meisels, 1989). When teacher competence is determined by children's test scores, the pressure to teach to the test becomes attractive to the most professional teacher, and the developmentally appropriate curriculum is distorted into mindless memorization and decontextualized experiences.

Curriculum for children who are considered poor scholars is usually even more restricted than that available to the average child. Separating children into ability groups results in unequal access to knowledge as teachers provide children judged as having low ability with less content breadth and depth than that provided to better students. The rationale for such treatment is that by constricting the

curriculum, the slower student will be able to concentrate on "basic skills." Achievement grouping, however, encourages teachers to offer an enriched curricula only to the faster learners, thus increasing their advantage over slower students. This practice has continued despite evidence that mixed ability groupings are more desirable socially and do not have to have negative consequences for the more advanced children (Oakes, 1988).

Tracking children tends to develop inappropriate social attitudes because poor and minority children are usually segregated in low ability groups. Teachers of such groups are described as "less encouraging and more punitive, placing more emphasis on discipline and behavior" (Oakes, 1988, pp.41) Such grouping procedures not only short change the young child, but may play a role in children's negative attitudes about school, so that the intervention itself increases the child's risk. Oakes lists the following alternatives to tracking: creating new conceptions of ability, developing curriculum rich with meaning, and providing evaluation that supports learning.

Early childhood specialists, who decry the use of tests to determine curriculum and assure accountability, recommend oral tapes and portfolios of written and art work as better indicators of children's learning status and accomplishments than standardized tests (Bredekamp & Shepard, 1989). Investigators are working to identify valid ways of assessing these productions (Sulzby, 1986) and to structure such approaches so they can be used for accountability purposes (Dixson, et.al., 1987). Considerable research is needed to standardize these strategies and should receive priority for funding. In the meantime, Head Start Performance Standards and the National Association for the Education of Young Children's Center Accreditation project (Bradekamp, 1984) recommend procedures for evaluating early childhood classrooms; however, few school districts or state boards have adopted these standards.

SECTION II: MEETING THE NEEDS OF POOR AND MINORITY CHILDREN

Among the most urgent problems facing schools is to improve the skills of children who traditionally do not achieve well. Children at-risk has become the popular designation for these children who are usually poor, from the inner city and rural communities, from families and communities characterized by poverty, broken homes, substance abuse, poor health and treatment facilities, poor housing and schools, high crime rates, and adolescent parenting. These are largely minority group children who, with their families and communities, are subject to prejudice and discrimination. (The label "minority" refers to racial, cultural, and cultural/linguistic groups who are outside of the mainstream of American life--African American, Hispanic--Mainland Puerto Rican, Mexican American, Central and South American--Native Americans, and Asians.) While no one of the social stresses experienced by poor and minority children by itself predicts academic failure, the accumulation of stressors vastly increases the risk for children.

The National Assessment of Educational Progress (NEAP) reported that African American and Hispanic students and those from low socioeconomic backgrounds consistently achieve below the national average in mathematics and language skills, with an ever widening gap between some minority students and whites through the school years (Reyes & Stanic, 1988). Up to the age of three or four, children are remarkably similar in development, but subsequently there is a steady erosion of the potential of poor and minority students in relation to whites. The forewarning of school failure for these children is audible by the third grade as children develop school-related dispositions and attitudes (Alexander and Entwhistle, 1988). Alexander and Entwhistle reported that while beginning first grade test scores showed little difference between African American and white children, by the end of the year the cognitive gains of African American students have already begun to fall short of those of white students, and by the end of the second year, African American children's scores lag by a fourth of a standard deviation. Alexander, Entshistle (1989) wrote, "by the end of the third grade, children are launched into achievement trajectories that they follow the rest of their school years" (p.1). Gradually and inevitably, poor and minority students have less and less success in school.

Factors Associated With Risk

While it is clear that many poor and minority children are at risk for academic failure, the reasons for their failures are less evident. Five factors are usually associated with their poor performance: poverty--more minority children are reared in low income families than are white ones; cultural styles which are different from school culture; prejudice and discrimination directed toward poor and/or minority children, their families and communities; patterns of family support and guidance, and inadequate educational resources.

Poverty. There are a number of factors that account for why poverty predicts such dismal outcomes for children. Being poor sometimes impedes development, as when children do not have adequate food, shelter, and care. It is useful to make a distinction between developmental failure, caused by biological insult or social deprivation, and educational failure, caused by the misfit between what children have learned at home and what school and the society require. The incidence of developmental handicaps among children at risk is undoubtedly higher than in the general population because pre-and post-natal misadventures are more common. One estimate is that health problems (low birth weight, lead poisoning, anemia and hearing problems) may account for as much as 30 percent of the variance between the cognitive development of poor and middle class children (Research Bulletin, 1989). Some children do not receive sufficient care to develop well. Responsive and responsible parenting, so essential to healthy development, is often precluded by the exigencies of living poor, and deprivation, neglect, and abuse may distort and delay development. It is difficult to estimate how many children fall into this category, but the majority of at-risk children probably are developmentally normal or have relatively minor biological or psychological handicaps.

Many poor families are subject to stress as poverty exacerbates daily life problems, which in turn affects children's potential for school success. For instance, poor working mothers often must make inadequate arrangements for the care of their children (Howes, 1987). Some parents, often adolescent single mothers, are unable to mobilize sufficient resources or do not know how to assist their children

in developing the educational values and practices to ensure school success. Being poor is not just having too little of the basic necessities. Families that do not have what they think they need, what they consider their fair share, often feel cheated, demoralized, angry and depressed, and their ability to care for people and things is diminished. Communities where poor people live reflect this psychological impoverishment. As Wilson (1987 A) pointed out, families that are "making it" move out of poor communities, leaving children without role models for economic achievement and/or social stability in either home or community. Even if the family itself is functioning well, living in a disorganized and depressed community makes life dangerous and unpredictable--conditions that are stressful for children.

Cultural style Many minority children find success in school difficult because their cultural style is different from that of the school. Shade (1982) wrote, "diversity found in task and academic competence is precipitated by differences in culturally induced psychological, cognitive, and behavioral strategies rather than ability differences" (p. 219). Culture groups teach their children styles of relating, communicating, thinking and believing that affect how the children understand the nature of the physical and interpersonal environment, and how they organize and categorize people and things. Cultural style is not a straightjacket, nor does it compromise development, or preclude other ways of thinking and acting: many people are bicultural.

Hale (1982) and others have characterized the African American style as being more relational, and more people oriented, more expressive than that of white culture. Lawson (1986), noted that the pattern of answering questions characteristic of African American children leads them to respond to test questions differently than white children. The study noted that African-American children's responses were more likely to be analogical (answers that related objects or events to themselves or their experience), rather than referential (ones that name the object or event). Analogic and referential answers were in all the children's repertoire, but children of each group used the type that in

their past experience was appropriate to questions-asking situations. What was different was their assessment of the question-answering strategy called for in the test situation.

When teachers come from different cultures, use different languages and dialects than the children, they may be unaware of the difference between their understanding of the context of a situation and that of the child. The teacher's expression may differ on many dimensions, verbal, corporeal and ideational. When adults and children do not share common experiences, do not hold common beliefs about the meaning of experience, the adults are less able to help children express their ideas (Bowman, 1989).

Seeing the relationship of school knowledge to one's personal and cultural identity is a predictor of academic strength (Reyes & Stanic, 1988), so attention to style differences of poor and minority children is important if instruction is to be improved. The problem in school performance, however, lies not so much in the style differences between the children and the school, but in the denigration of the experience and culture of minorities within and outside of school.

Racial and linguistic bias Prejudice against minorities is also given as a reason for minority children's low school achievement. Cummins (1989), suggested that "the causes of their (minority children's) academic difficulties are to be found in the ways schools have reinforced, both overtly and covertly, the discrimination that certain minority groups have historically experienced" (pp. 111). He posits that reinforcing the powerlessness of subjugated minorities leads to ambivalence and insecurity regarding their own cultural identity and alienation from the aspirations and culture of the majority. Children learn beliefs about schooling during their early years about color, what it means to be a learner, and what is worth knowing. Ogbu (1978) contended that alienation from the goals and personnel of the school plays a major role in the lack of school success of many poor black children. He said that school work seems irrelevant to daily life of caste-like people whose world has quite different boundaries than that of mainstream groups. Enwhistle and Alexander (1989) reported that teachers who come from

high status groups perceived low status minority children less favorably than teachers from lower status groups. High status teachers evaluated poor black children as less mature, and held lower expectations for them than for children whose status was closer to their own.

"If you are not inferior, prove it" (Steele, p. 504). Steele wrote that the racial shock of integration forces blacks into a defensive posture to avoid the possibility they really are inferior. These defensive postures include avoidance of opportunity, withholding of effort, and self segregation. Steele suggests that the major task for the black community is to rid itself of self doubt through confrontation rather than through avoidance. Unfortunately, most poor and minority families do not elect to confront the schools on which they and their children must depend, and self doubt and failure continue.

Family expectations and support The family has been identified by many researchers as pivotal in whether children are successful or unsuccessful in school. Family and community expectations, values, and rewards exert a strong influence on children's beliefs and attitudes. Mordkowitz & Ginsburg (1987) studied Asian American students who attended Harvard University to assess why they were so successful in school, particularly in mathematics. They identified a constellation of family characteristics of successful students: high expectations, personal support, and supervision. Surprisingly, they found that the successful students came from families in which there was little verbal interaction between parents and children and speculated whether this low level of verbalization may have fostered interest in math and science related subjects as opposed to social sciences.

Black children have been particularly vulnerable to school failure, yet as McAdoo (1989) wrote, "Black parents do value education and achievement" (p. 149) She suggests that the problem is that the desire to achieve does not always match the means to achieve within lower-class or black families. Alexander and Entwistle (1988) noted that many black families whose children score lower on mathematics tests set less realistic expectations for their children than white parents. These parents often accept too low an assessment of their children's abilities and performance and do not buffer early failures as well as do

white families. Black parents seem to have less confidence in their own judgement of their children's abilities and skills and are more willing to accept the judgements of teachers--whether these are accurate or not. Children internalize the assessment of both parents and teachers, thus lowering their aspirations and goals. Poor school performance, then, is attributed to learned helplessness, a state in which children who have experienced failures, or who are led to believe that they will fail, become passive and unwilling/unable to perform learning tasks.

The social class of families has also been implicated as a factor in children's school difficulties. Saxe, Guerman and Gerhart (1987) investigated differences between the types of number experiences and the skills of middle and lower class children. All young children encounter number knowledge in their daily lives, and parents are quite similar across social class in how they adapt knowledge to "fit" the children's interest in and understanding of number. What distinguishes between lower and middle class environments is the achievement expectation of the mothers and the complexity of the problems mothers set for their children. Saxe, et al. (1987) pointed out that middle class children whose mother's facilitate their experience with mathematics by posing problems of greater complexity perform at a higher level than children from lower socioeconomic groups. There is a high correlation between school achievement, the education of mothers, and poverty. It is difficult to see how the trajectory of school failure can be avoided without training and employment programs for parents. Relying on classroom programs for children and education and support programs for parents is unlikely to go very far in reversing underachievement.

Parents not only must have high expectations for their children's school performance, they must do things that facilitate school learning (Mordkowitz & Ginsburg 1987). The factors most often correlated with high achievement are family support of education, reading materials in the home, stable family life, and cultural activities in which children and parents participate. Although there is considerable agreement as to the characteristics of families of achieving students, there is no blueprint for how to enable families that do not have these attributes to acquire them. Obviously, many of the child rearing

patterns of poor and minority parents are deeply embedded in their perceptions of the world and their place in it. Without changing the reality of their every day lives, or inspiring hope that the conditions can be changed, it is unlikely that many parents will accept different ways of behaving.

Resources Differentials in the tax base available for schools also correlates with the academic performance of children. The children most at risk are in communities spending the least for direct educational service, yet these children need more than most children in order to be effective learners. Inadequate supplies, educational health and social service staff, outreach personnel, and child and parent counselors make it unlikely that many schools serving poor children can expect to be more successful.

Reyes & Stanic (1988) explained the poor performance of at risk students by such factors as "societal influences, school curricula, teacher attitudes, student attitudes and achievement-related behavior and classroom processes" (p. 40). They suggested that additional research is needed to clarify the relationship of these variables to each other and to children's performance.

Early Intervention

Early intervention can prevent or ameliorate educational disadvantage for children at risk. (Wilson, 1987; Berrueta-Clement, 1984; Consortium for Longitudinal Studies, 1983) Early education programs can affect short term school-related skills, but also long term social outcomes (Lazar, 1982) The assessments of Head Start, Follow Through, Chapter 1, and a variety of other projects have all pointed to the benefits of an early intervention program for children's social and academic achievement (Shorr, 1988). The success of early intervention programs has led to their proliferation and put early childhood education in the front line in the search for educational equity; however, only 20-30 percent of children considered to be at risk are enrolled in early intervention programs.

Successful early interventions achieved positive results using different instructional models, but the program components most often found were parent involvement and cooperation, parent education, health and social services as needed, and good quality education programs implemented by well trained and enthusiastic staffs. Analysis of effective programs indicated that a number of different configuration can be successful.

Nevertheless, most early interventions have not fully offset the effects of detrimental social conditions. Poor children who receive a quality early childhood program achieve better than their peers who do not, but not as well as middle class children. Many low birth weight infants, for instance, recover without incurring intellectual insult, but not usually in homes characterized by low social and economic status (Wilson, 1987). School programs that do not take into account and respond to social ills such as racism, unemployment, inadequate health resources, drugs, and community disorganization are apt to be unsuccessful in changing educational outcomes. There is no reason to believe instructional programs for young children can compensate for these social deficiencies and injustices. Much of the success of Head Start was probably becauase it was linked with economic development, adult education, political education, and health, social and nutritional services (Zigler, 1987).

School success or failure is responsive to a variety of factors, including constitutional and environmental strengths and weakness. Biological resiliency, family nurturing, and community institutions, like school and church, buffer or intensify children's experiences, so that some children escape relatively unscathed from experiences which severely affect others. Generally, however, the degree of risk predicts the number and extensiveness of services needed to reverse the prognosis of school failure. In order to be effective, intervention programs must provide a match between the risks to which the child is exposed and the intensity and breadth of the intervention. Interventions that only include classroom educational programs are, usually insufficient for children at risk. Poor children may need health, nutrition and psychological services; young children with disabilities need a wide range of services as well as specific therapies; parents of both groups of children need support and involvement.

The entire array of health, welfare, and educational resources must be available to bear on the needs of at risk young children and their families. These resources can either be engaged in synergistic relationships or they can operate at cross purposes. Currently, many programs oppose one another. For example, the children of welfare clients in training or working at low pay jobs (an educationally high risk group) are not routinely provided with the types of supportive day care, health resources and educational programming known to facilitate school success. Children who are in stressful and inadequately supervised day care settings usually make poor scholars, and poor children are more often in such care arrangements than are middle class children (Howes, 1987). Few schools and centers take responsibility to integrate and coordinate their programs. Young children, particularly those at risk, require greater consistency and continuity in their lives than do older children, if they are to learn and develop well. Makeshift arrangements, multiple caregivers, and frequent changes in care are more likely to have an adverse effect on vulnerable children.

While many early intervention programs have contributed immeasurably to children's achievement, some have become new risks, and themselves threaten children. Examples of double jeopardy include the following common school practices: normal but culturally different children are misdiagnosed as handicapped and their educational opportunities curtailed; tracking, retention, and "pull out" therapies restrict learning opportunities and stigmatize the children; poor articulation between preschool and kindergarten/primary programs results in different expectations and standards; and poor communication between intervention programs and primary caregivers resulting in cultural and interpersonal conflict.

Fillmore (1988) said, "What is needed is an early education policy which not only offers minority background children preparation for life in the larger society, but which, at the same time, does not diminish family life in their homes."(p. 29) Cummins (1989) wrote "schools have traditionally reinforced the ambivalence and insecurity that many minority students tend to feel with regard to their

own cultural identity" (pp.111). The implication of his analysis is that prevention of academic difficulties among minority students, and genuine remediation, requires that educators adopt role definitions that challenge rather than reflect the values of the wider society. Teachers working with children from culturally different groups not only need to know about and respect the home culture of the children, also they must know how to teach the culture of the classroom to them.

Early intervention programs for at risk children make good sense educationally and economically (Berreta-Clement, et. al., 1984). However, they should not be seen as cheap and easy solutions to the problems of minority and poor children's school failures. In order to be effective, programs require extensive resources both human and material; an array of services, tightly coordinated and easily accessed; and a long term commitment to poor children and their families. Without these ingredients, early intervention is not likely to be successful on a scale large enough to change the disheartening economic and social prognoses for the Twenty-First Century.

SECTION III: PUBLIC SCHOOLS

The public school is the most important player in the educational success of children. The National Association of School Boards of Education report Right From the Start (1988) pointed out the challenges facing the public schools and the potential of early childhood programs to help address them (1988). They recommended that the school "provide a new pedagogy for working with children ages 4-8", that they become a "focal point for enhanced services to preschool children and their parents", and "develop partnerships with other early childhood programs and community agencies to improve services for children and families." Similar recommendations have been endorsed by The California School Readiness Task Force (1988), the Association of State Early Childhood Specialists (NAECS/SDE), and the National Association for the Education of Young Children (Bredekamp, 1987).

At the heart of classroom practice is the training of personnel. Teacher preparation for public school early childhood programs is far from ideal. All states have requirements for teaching certificates for kindergarten and primary grade teachers, but certification programs are often combined with and overwhelmed by emphasis on grades 4 through 8. Nineteen states have certification standards that include preschool, three have certificates that extend from birth to the third grade (age eight), and nine certify teachers for preschool and primary grades. The remainder of the states have no special preschool certification standards (Phillips, 1988). Some states provide for early childhood and/or kindergarten endorsements to elementary certificates, but these may entail no more than taking a few courses. In public schools, then, few teachers have had significant or specific training in the pedagogy of early childhood or training for working with parents and supervising adults (Bowman, in press).

Most public school teachers emerge from preservice programs with limited theoretical knowledge, little sensitivity or understanding of minority populations, and little understanding of how to apply theoretical constructs to classroom practice. Certification requirements that stress maximum flexibility for seniority prerogatives and administrator convenience drives teacher education programs to prepare teachers to teach a wide age range of students. Most states have certification that encompasses the first eight years of schooling--birth to grade 3 or kindergarten to grade 6 or 8. High school certification covers only four years. Only eighteen states have certification for pre-school teachers, which means many teachers are working in public schools without a minimal, relevant knowledge base for practice. Other state standards are quite low. Illinois, for instance, requires only one course in child, family, and community relationships, yet working with families and community resources is one of the primary responsibilities of the early childhood teacher.

Few teacher preparation programs adequately prepare their graduates to work with children from poor and minority communities. Many educators, professional groups, and public policy makers believe that one way of improving schools is to have teaching staffs that reflect the racial and cultural diversity of the United States. It is argued that having teachers of every ethnic, racial, and cultural background

offers opportunities for all children to see representatives of their own and other groups in the status roles of teachers and principals. Yet, in 1988, fewer minority students were preparing for careers in education than in the past (American Council on Education, 1988b), and the pool of minority teachers is growing smaller in relation to the population. Minorities constitute 26 percent of the American school children, and are less than 12.5 percent of the teachers. By 1990 minorities will have grown to 30 percent of child population and the percentage of minority teachers will have shrunk to 5 percent (Whitehurst, Witty, & Wiggins, 1988).

The failure of minorities on qualifying examinations for public school teaching positions is also a cause for alarm. A survey on the effects of testing on the supply of minority teachers revealed a high failure rate. For example, in California in 1986-87, 34 percent of African Americans, and 59 percent of Mexican Americans passed the test for a teaching credential (Field, 1988). Special efforts must be made if the number of minority teachers with four year degrees in child development or education are to be increased.

Few school systems provide adequate in-service, supervision, and technical assistance for teachers. Union contracts often prevent teachers from participating in educational programs outside of school hours; support staffs are often spread so thinly they are unavailable to assist teachers in their day to day problems; teachers are unsupported as they face problems for which they have not been prepared--substance abuse, adolescent parents, working mothers; and time for peer reflection and problem solving is limited. The more impoverished and needy the school district, the more likely these problems will be exacerbated by poor morale among the teaching staff and social distance from families and community members.

Support personnel also have little training to work with preschool age children and with poor and minority children. For instance, speech pathologists often have not been prepared to work with young children or linguistically diverse children. The typical practice of taking children out of the classroom

for brief periods of individual therapy usually is not the most effective treatment for most young children. Further, many speech behaviors which are problems in older children (such as unclear articulation) are normal in young children. Other support personnel are equally unprepared: curriculum consultants, library and resource teachers, and psychologists are generally unfamiliar with preschool children and resources.

Administrators who understand the dimensions of an effective preschool or early intervention program or have the ability to implement and support such programs are not usually found in public schools. Principals or superintendents have themselves had little experience working with young children or in providing supportive services to families, and few can provide leadership or supervision for teachers in planning, implementing, or evaluating preschool programs. It is understandable that many school leaders also see the early childhood program as one that will require little of their time and effort. Young children are seldom seen as demanding of administrative time or energy, particularly when administrator are also responsible for pre-adolescents who are apt to be considerably more disruptive.

I have noted already, working with families is a critical dimension of early childhood programs. Children are dependent on the cooperation between parents and teachers if they are to be competent and enthusiastic learners. This cooperation is even more important for poor and minority children. Zigler (1987) pointed out that successful intervention programs differ from conventional schooling in a number of ways, but particularly in their comprehensive character, and their emphasis on the family as opposed to the individual child. Yet Marx and Seligson (1988) reported many public schools limit their services to classroom programs and "pull out" therapies.

Public schools also have been slow to develop cooperative arrangements with other service delivery systems. Most public schools are not accustomed to integrating their programs with those of other delivery systems. In Illinois, for example, where school districts are permitted to contract services to not-for-profit organizations, in 1988,only 10 percent had done so, and no district made a cooperative

agreement with a day care facility. Districts have preferred to use the format with which they are most familiar: half day programs in self contained classrooms (Mitchell, 1988).

Coordination with day care is especially important. Most schools operate six hours a day for ten months, often leaving children inadequately supervised and cared for during the remainder of the day or year. Many preschool and kindergarten programs are in session only three hours so that the youngest and most vulnerable children are often exposed to the most inconsistent and inadequate care. Although increasing numbers of schools provide space for before and after school programs, many arrange no coordination between the school and the day care staffs, often requiring children to adapt to sharp philosophical and personality differences as they move from one program auspice to another.

Funding for preschool programs is also a problem. Competition among programs for the education dollar is sharp. The argument against the downward extension of public schools to include preschool programs is cogent: if schools are currently failing to adequately educate older children, should not the highest priority be to improve programs for them. The cost benefits said to accrue to preschool interventions were extrapolated from model program funded at higher levels (Haskins, 1989). Unless public schools can mobilize themselves to change traditional organizational patterns and accountability structures, incorporate new pedagogical practices, and respond to family needs, introduction of preschool programs will probably not improve the educational outcomes for young children.

SECTION 4: POLICY RECOMMENDATIONS

1. Improving education for the youngest citizens will require the development of new knowledge about the most effective ways to organize and carry out educational programs. Although the present research base is sufficient to sketch broad outlines for policy and practice decisions, it is not adequate to guide the difficult day to day decisions of practitioners, administrators, or parents. Research is currently unable to define in very precise terms the learning environment necessary for each individual child to grow into a healthy and productive citizen; indeed, to expect such precision is undoubtedly unrealistic.

In view of a tentative knowledge base, practitioners and policy makers should approach early education carefully, leaving room for alternative views and practices within the scope of our general knowledge. National standards, rigid accountability measures, and standardized curricula, or programs should be approached with great caution. More careful examination of successful practice--in all its richness--by those closest to the programs and most interested and invested in them should be encouraged.

Human development is an enormously complicated process not likely to be addressed with simplistic public policies or practices. The effort to improve education through testing is a case in point. Many states and school districts, with the best intentions, have instituted policies and practices which confound the achievement of young children. Decisions should not be made for young children on the basis of tests generally agreed to be inadequate assessors of their knowledge and skill. The difference between accountability and oppression may be quite small. Research into new and more productive ways of assessing competence is of critical importance and needs a high priority for funding.
Recommendation: AVOID RIGID STANDARDS OF PRACTICE AND ACCOUNTABILITY INCLUDING "HIGH STAKES" TESTING

2. Making schools more responsive to children and families will require uncomfortable changes in the traditions of service in schools. Cuban (1988) said that those who believe it will be easy to convince teachers to change are ignoring the power of the school culture. He contended that pressure from outside the school would be necessary if reforms are to be adopted and implemented. Among the changes needed is a new conception of the worker/management relationships. The traditional trade union emphasis on wages, hours, and work rules does not lend itself easily to professional practice. As day care providers seek higher pay and status, they too will be pushed toward organizing for their own self interest. New models of professional protection and work incentives would be a useful contribution to the quality of education and other human services as well. Such models might include cooperative school management, with teachers and administrators as shareholders, new governance

partnerships, which include parents, administrators, and teachers, and new systems for evaluating administrative and teaching competence.

Recommendation: ENCOURAGE NEW GOVERNANCE AND ADMINISTRATIVE STRUCTURES

3. The education of children does not occur in isolation from other aspects of their lives. Support of nursery schools, prekindergarten programs, day care, and Head Start are of equal importance to educational achievement as support of elementary schools, high schools and colleges: young people learn important lessons at all of these ages. Parent education and involvement are as important as classroom organization and teaching practices: children learn both at home and at school. Public health and nutrition is essential to academic performance: children learn best who are health in mind and body. All levels of schooling and the human services are necessary to support children's ability to learn.

At-risk children are in need of attention to the range of issues that affect the quality of their lives. They are especially vulnerable to the poor quality day care; yet poor families find it particularly difficult to arrange for adequate care for their children. Day care, funded through Social Service Block grants, has huge waiting lists in inner city neighborhoods, and parents are unable to afford care in for-profit centers and licensed homes. Housing deterioration in poor communities also makes licensed day care difficult to find even for families who can afford it. Children with handicapping conditions are difficult to place in day care because their need for extra attention induces higher costs. Consequently, the children most at risk are also most likely to be in inadequate day care, thus increasing their risk of school failure.

New models need to be devised and publicized to encourage public schools and half-day Head Start programs to make cooperative arrangements with other human services agencies and institutions. It is in the interest of the schools to work with these programs so that the children and their parents receive

the support they need. Schools can no longer draw sharp divisions between their responsibilities and those of families, agencies and institutions that prepare children for school.

Recommendation: COORDINATE SCHOOL PROGRAMS WITH DAY CARE AND OTHER EDUCATIONAL SERVICES.

4. Even when funds are available for high risk children, the level of funding often precludes effective programs. The costs of the most successful intervention programs are inevitably high. The Perry Preschool Project cost approximately $5,000 per child in 1981 dollars (Weikart, 1988, p.68). Today, most federal and state funded programs spend far less and expect to achieve similar results. No studies show that programs can achieve the long term results of the pilot projects at considerably lower funding levels. Early childhood programs are labor intensive and personnel accounts for between 60-80 percent of program costs. Without strong leadership in obtaining funds and assisting in developing quality programs, the benefits of an early childhood program will not to be realized.

Recommendation: PROVIDE ADEQUATE FUNDING FOR INTERVENTION PROGRAMS

5. All public policies should be consonant with the educational achievement of children. For instance, welfare reform should not create additional burdens for the education system by failing to fund adequate day care for children. While it is essential to avoid imposing a single option for the care of children whose parents are engaged in training or work programs, it is counter productive to encourage them to use arrangements that do not contribute to their children's school success. Single agency solutions to single problems will not create the synergy necessary to change outcomes for children.

Recommendation: REEVALUATE HUMAN SERVICE PROGRAMS FOR THEIR CONSISTENCY WITH THE GOAL OF EDUCATIONAL ACHIEVEMENT FOR ALL CHILDREN.

6. Nowhere is change more essential than in obliteration of residuals of racism and classism. While many of the more blatant discriminatory practices of a generation ago have been excised, many still

exist. Cuban (1988) noted that far reaching school changes, what he calls second order changes, are unlikely to occur without a pervasive social commitment. Accordingly, changes in the school performance of minority children is dependant upon changes in a social system that devalues people of color. Efforts of political, economic and educational leaders who have outlined the dangers to the nation's future of low achievement among minorities may instigate a new social consensus around social equality. Unfortunately, equity for dark-skinned minorities has proven an elusive goal.

"Children from the poorest families and communities are the most susceptible to small variations in school quality, presumably because their learning depends so critically on the resources and stimulation provided" (Ralph (1989, p. 398). Changing outcomes for poor and minority children in schools will not be easy. If it can be done at all it will mean making significant changes in the ways schools are organized, in the training of personnel and in the quality of instruction offered.

Recommendations: REFORM PROGRAM FUNDING FOR POOR CHILDREN AND PLACE A PRIORITY ON MULTICULTURAL UNDERSTANDING AND NON-BIASED PRACTICES IN SCHOOLS.

7. Much is known about early childhood education. Schools and policy makers can pay attention to what has already been learned about child development and how to organize and structure programs for young children. Or, they can try to fit the children into the system the way it is, knowing that the status quo is unlikely to result in meaningful education for many of this nation's children. Schools can develop programs to enrich the lives of children and families and protect the future of our society. Or, they can ignore what is known and complain a generation from now that early childhood intervention was a failure.

Recommendation: IMPLEMENT WHAT IS ALREADY KNOWN ABOUT QUALITY IN PROGRAMS FOR YOUNG CHILDREN

BIBLIOGRAPHY

Alexander, K. & Entwisle, D. (1988) Achievement in the First 2 Years of School: Patterns and Processes. Monograph of the Society for Research in Child Development, V.53, N.2.

Auerbach, E. (1989). "Toward a Social-contextual Approach to Family Literacy. Harvard Educational Review, Vol 59, no. 3, pp. 165-182.

Behounek, K., Rosenbaum, J., Brown, L. & Burcalow, J. (1988) "Our Class Has Twenty-five Teachers." Arithmetic Teacher, December, p. 10-13.

Berk, L. (1985). Relationship of education to child-oriented attitudes, job satisfaction, and behaviors toward children. Child Care Quarterly, 14, pp. 103-129.

Berreta-Clement, J., Schweinhart, L., Barnett, W, Epstein, A. & Weikart, D. (1984) Changed Lives: The Effects of the Perry Preschool Program on Youths Through Age 19. Ypsilanti, Mi.:High/Scope Educational Research Foundation.

Bloom, B.S. (1985). Developing Talent in Young People. New York: Ballentine.

Bowman, B. (1989). "Educating Language-Minority Children: Challenges and Opportunities. Phi Delta Kappan, Vol.71, No. 2, pp. 118-121.

Bowman, B. (in press). "Issues in the Recruitment, Selection, and Retention of Early Childhood Teachers." Yearbook in EArly Childhood Education, Volume 1: Early Childhood Teacher Preparation. New York: Teacher College Press.

Bredekamp, S., Ed. (1984). Accredition Criteria and Procedures. Washington, D.C.: National Association for the Education of Young Children.

Bredekamp, S.,(1987) Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8. (Washington, D.C.: National Association for the Education of Young Children.

Bredekamp, S. & Shepard, L. (1989). "How Best To Protect Children From Inappropriate School Expectations, Practices and Policies." Young Children, Vol. 44, No. 3, pp. 14-25.

California Department of Education (1988). Here They Come: Ready or Not! Report of the School Readiness Task Force.

Child Care Employee Project. The National Child Care Staffing Study. "Who Cares? Child Care Teachers and the Quality of Care in America." Oakland, 1989.

Children At Risk (1981). Report of the Commission on Excellence in Education.

Committee for Economic Development, (1987) Children in Need: investment strategies for the educationally disadvantaged. New York: CED.

Consortium for Longitudinal Studies (1983). As the Twig is Bent: Lasting Effects of Preschool Programs. Hillsdale, N.J.: Lawrence Erlbaum.

Cole, M. & Griffin, P. (1986). "A Socio-Historitical Approach to Redediation," in L. de Castell & K. Egan, eds., Literacy, Society, and Schooling. Cambridge: Cambridge University Press.

Cuban, L. (1988) The Persistence of REform in EArly Childhood Education. Paper prepared for the Early Education Task Force of the National Association of School Boards of Education.

Cummins, J. (1989). "A Theoretical Framework for Bilingual Special Education." Exceptional Children, Vol. 56, No. 2, pp. 111-119.

Dixson, E., Peters, C., Weber, E., Roeber, E. (1987) New Directions in Statewide Reading Assessment." The Reading Teacher, April, pp. 749-754.

Elkind, D.(1988) "From Our President: Play." Young Children, Vol. 43, no. 5, p.2.

Elkind, D. (1981) The Hurried Child: Growing Up Too Fast, Too Soon. Reading, Mass: Addison-Wesley, 1981.

Entwhistle, D. & Alexander, K. (1989) "Children's Transition into Full-Time Schooling: Black/White Comparisons." Early Education and Development, Vol. 1, No. 2, pp. 85-104.

Exxon Educational Foundation/Erikson Institute Early Childhood Mathematics Project, Final Report (1989) Erikson Institute, Loyola University of Chicago.

Fields, C. (1988). Poor Test Scores Bar Many Minority Students from Teacher Training. Chronicle of Higher Education, November 2, p A1.

Fillmore, L.& Britsch, S. (1988) "Early Education for Children From Linguistic and Cultural Minority Families." Paper prepared for the Early Education Task Force of the National Association of School Boards of Education.

Gelman, Rochel, & Gallistel, C.R. (1978). The Child's Understanding of Number. Cambridge, Ma.:Harvard University Press,

Ginsburg, H. (1982) "The Development of Addition in the Contexts of Culture, Social Class, and Race." in T.P. Carpenter, J.M. Moser, & T.A. Romberg (Eds.), Addition and Subtraction: A Cognitive Perspective. Hillsdale, N.J.: Lawrence Erlbaum Assoc.

Ginsberg, H. & Yamamoto, T. (1986). "Understanding Motivation and Teaching: Comment on Lampert's "Knowing, Doing, and Teaching Multiplication." Cognition and Instruction. Vol. 3, No. 4, pp. 357-370.

Greenfield, P. (1984) "A Theory of the Teacher in the Learning Activities of Everyday Life." in B. Rogoff, J. Lave (Eds), Everyday Cognition. Cambridge, Ma.: Harvard University Press.

Hillard, A. & Vaughn-Scott, M. 1982. "The Quest for the Minority Child." In S. Moore, C. Cooper, (Eds), The Young Child: Reviews of Research, V. 3. Washington, D.C.: National Association For the Education of Young Children. .

Hohmann, M., Banet, B. & Weikart, D. (1979). Young Children in Action. Ypsilanti, MI.: High Scope Press.

Howes, C. (1987). "Quality Indicators in Infant and Toddler Care: The Los Angles Study. In D. Phillips (Ed), Quality In Child Care: What Does Research Tell Us. Washington, D.C.: National Association for the Education of Young Children...

Haskins, R. (1989). "Beyond Metaphor: The Efficacy of Early Childhood Education." American Psychologist, Vol. 44, No. 2, pp. 274-282.

Hubell, R., Condelli, L, Ganson, H., Barrett, B., CeConkey, C., Plantz, M. (1965). Final Report of the Impact of Head Start on Children, Families and Communities: Head Start Evaluation, Synthesis and Utiliation Project. Washington, D.C.: Adminstration for Children, Youth and Families, Office of Human Development Services, Department of Health and Human Services.

Kagan, L. & Zigler, E., Eds. (1987). Early Schooling. New Haven, Yale University Press.

Kamii, Constance, "What Do Children Learn When They Manipulate Objects?" The Teachers' Center Project, Southern Illinois University Edwardsville.

Kamii, C., DeClark, G. (1985). Young Children Reinvent Arithmetic. New York: Teachers College Press.

Kamii, C. & DeVries, R. (1975). "Applying Piaget's Theory to the Teaching of Elementary Number." Urban Education Research Program.

Katz, L. (1987) "What Should Young Children Be Doing? " In L. Kagan, E. Zigler (Eds.), Early Schooling. New Haven, Yale University Press.

Lampert, M. (1986). "Knowing, Doing, and Teaching Multiplication." Cognition and Instruction Vol. 3, No. 4, pp. 305-342.

Laborde, C. (1989) Book Review. Harvard Educational Review, Vol. 59, n. 2. p. 263-268.

Lazar, I. (1982). "Lasting Effects of Early Education: A report from the Consortium for Longitudinal Studies." Monographs of the Society for Research in Child Development, 45, (203, Serial No. 195).

Lewis, A. (1988). "Reading the Writing on the Wall." Phi Delta Kappan, Vol 69, No. 7, pp. 468-469.

Mitchell, A. (1988) The Public School Early Childhood Study: Case Studies. New York: Bankstreet College of Education.

Martin, A.(1987). "Back to Kindergarten Basics." In M. Okazawa-Rey, J. Anderson, R. Traver (eds), Teachers, Teaching, and Teacher Education. Cambridge, Mass.: Harvard Educational Review.

Marx, F. & Seligson, M. (1988) The Public School and Early Childhood Study. New York: Bank Street College of Education.

McAdoo, H. (1988) "Response to Alexander, K., Entwisle, D. Achievement in the First 2 Years of School: Patterns and Processes. Monograph of the Society for Research in Child Development, V.53, N.2.

Meisels, S. (1989). "High Stakes Testing in Kindergarten." Educational Leadership, April, pp16-22.

Michigan State Board of Education (1988). Standards of Quality and Curriculum Guidelines For Preschool Programs for Four Year Olds.

Mordkowitz, E. & Ginsburg, H. (April, 1987) "Early Academic Socialization of Successful Asian-American College Students." The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, V. 9, n. 2, pp. 85-91.

National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE, 1987). "Unacceptable Trends in Kindergarten Entry and Placement." A position statement.

National Association of School Boards of Education (1988). Right From the Start. Alexandria, Va.: NASBE.

New York City Public Schools (1983). Getting Started in the All Day Kindergarten. N.Y.: Board of Education of the City of New York.

Oakes, J. (1988) "Tracking: Can Schools Take a Different Route?" NEA Today, Vol.6, no. 6, pp. 41-47.

Ogbu, J. (1978). Minority Education and Caste. New York: Academic Press.

Phillips, D. (ed) (1987). Quality In Child Care: What Does Research Tell Us. Washington, D.C.: National Association for the Education of Young Children...

Phillips, C. (1988). Briefing paper for the National Association of School Boards of Education (Draft). Council for Early Childhood Professional Recognition.

Piaget, Jean (1953). "How Children Form Mathematical Concepts." Scientific American, Vol.1898, No. 5, pp. 74-86.

Quisenberry, N. (1987). Teacher Education: Challenge for the future. Childhood Education, 63, pp. 243-247.

Ralph, John, "Improving Education for the Disadvantaged: Do We Know Whom to Help?," Phi Delta Kappan, Vol., No., Pp. 395-401, January 1989

Research Bulletin (1989). Cambridge, Ma.: Center for Health and Human Resources Policy, John F. Kennedy School of Government, Harvard University, Fall.

Reyes, L.H., Stanic, G. (1988) "Race, Sex, Socio-economic Status, and Mathematics." Journal for Research in Mathematics Education, Vol 19, No. 1, 26-43.

Rogoff, B. (1887) "Specifying the Development of a Cognitive Skill in its Interactional Cultural Context." In G. Saxe, S. Guberman, M. Gerhart (Eds,) "Social Processes in Early Number Development." Monograph of the Society for Research in Child Development, V. 52, n. 2.

Romberg, T., Carpenter, T. (1986). "Research on Teaching and Learning Mathematics: Two Disciples of Scientific Inquiry." In M. Wittrock (Ed.), Handbook of Research on Teaching. New York: MacMillan Publishing Co..

Ruopp, R., Travers, J., Glantz, F. & Coelen, C. (1979). Children at the Center: Final report of the National Day Care Study. Cambridge, MA: Abt Associates.

Saxe, G., Guberman, S., Gerhart, M. (1987) "Social Processes in Early Number Development." Monograph of the Society for Research in Child Development, V. 52, n. 2.

Schweinhart, L.(1987). "Child-Initiated Activity: How Important Is It In Early Childhood Education?" High Scope Resource, spring/Summer.

Seefeldt, C.(1980). A Curriculum for Preschools. Columbus: Charles E. Merrill.

Shade, B. (1982) "Afro-American Cognitive Style: A Variable in School Success." Review of Educational Research, Summer, Vol. 52, pp. 219-244.

Shepard, L. & Smith, M. (1988). Elementary School Journal, Vol 89, No. 2, pp. 135-146.

Steele, S. (1989). "Being Black and Feeling Blue." American Scholar,Vol 58m No. 4, pp. 497-508.

Schorr, L. (1988). Within Our Reach: Breaking the Cycle of Disadvantage. New York: Anchor Press.

Sulzby, E. (1986). Writing and Reading: Signs of Oral and Written Language Organization in the Young Child." In W. Teale & E. Sulzby, Emergent Literacy: Writing and Reading. Norwood, N.J.: Ablex Publishing Corporation.

Vygotsky, L (1976). "Play and its Role in the Mental Development of the Child." in J. Bruner, A. Jolly, K. Sylva (Eds.), Play-Its Role in Development and Evolution. New York: Basic Books.

Watkins, D. (1989, February 22). Mixed results seen in universities' efforts to reform teacher education. The Chronicle of Higher Education, A20.

Weikart, D. (1988) "Quality in Early Education." In C. Warger (ed), A Resource Guide to Public School Early Childhood Programs. Alexandria, Va.: Association for Supervision and Curriculum Development.

Whitebook, M. (1986). The teacher shortage. Young Children, 41, pp. 10-11.

Whitehurst, W., Witty, E., & Wiggins, S. (1988). Racial Equality: Teaching excellence. In J. Sikula (Ed.), Action in Teacher Education: 10th Year Anniversary Issue. Reston, VA: Association of Teacher Educators.

Wilson, W., (1987A) The Truly Disadvantaged. The inner city, the underclass, and public policy. Chicago: The University of Chicago Press.

Wilson, R.(1987)., "Risk and Resilience in Early Mental Development." in S. Chess, A. Thomas (eds.) Annual Progress in Child Psychiatry and Child Development. New York: Brunner/Mazel.

Wood, D., Bruner, J. & Ross, G. (1976). "The Role of Tutoring in Problem Solving." J. Child Pschol. Psychiat., Vol. 17, pp. 89-100.